

# Time Delay Relays

## SINGLE SHOT

### TRS Series



## Description

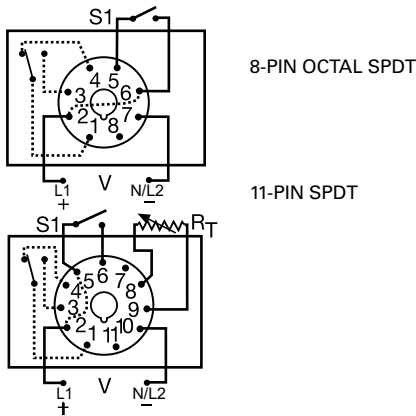
The TRS series combines an isolated, 8 A electromechanical, relay output with digital timing circuitry. False trigger of the TRS series by a transient is unlikely because of the complete isolation of the circuit from the line prior to initiation. The initiate contact is common to one side of the line and may be utilized to operate other loads. Installation is easy due to the TRS's industry standard 8 or 11-pin plug-in base wiring.

### Operation (Single Shot)

Input voltage must be applied to the input before and during timing. Upon momentary or maintained closure of the initiate switch (leading edge triggered), the output energizes for a measured interval of time. At the end of the delay, the output de-energizes. Opening or reclosing the initiate switch during timing has no effect on the time delay. Applying input voltage with the initiate switch closed will energize the load and begin the time delay.

**Reset:** Reset occurs when the time delay is complete and the initiate switch is opened. Loss of input voltage resets the time delay and output.

## Wiring Diagram



## Features & Benefits

FEATURES	BENEFITS
<b>Complete isolation of circuit from line</b>	No false trip due to transients
<b>Industry standard octal plug connection</b>	Eliminates need for special connectors
<b>Isolated, 8 A, SPDT output contacts</b>	Allows control of loads with independent voltage sources
<b>Digital circuitry</b>	Repeat accuracy +/- 2 %

## Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	OUTPUT FORM	TIME TOLERANCE	TIME DELAY
TRS120A2X300	120 V ac	Knob	8-Pin, Octal, SPDT	+/- 20 %	7–300 s
TRS120A2Y10	120 V ac	Knob	8-Pin, Octal, SPDT	+/- 10 %	0.1–10 s
TRS24D7Z10	24 V dc/28 V dc	External	11-Pin, SPDT no potentiometer	+/- 5 %	0.1–10 s

# Time Delay Relays

## SINGLE SHOT

### Accessories



**OT08PC 8-pin Octal Socket for UL listing\***  
8-pin 35 mm DIN-rail or surface mount. Rated at 10 A @ 600 V ac. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.



**OT11PC Octal Socket for UL listing\***  
11-pin surface & DIN rail mountable. Rated for 10 A @ 300 V ac



**P1011-6 Octal Socket for UL listing\***  
8-pin surface mount socket with binder head screw terminals. Rated 10 A @ 600 V ac.



**P0700-7 Versa-Knob**  
Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



**P1004-95, P1004-95-X Versa-Pot**  
Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



**C103PM (AL) DIN Rail**  
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

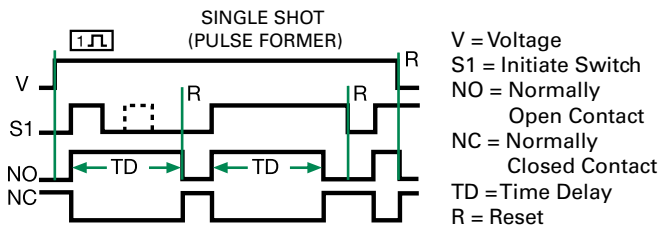
### Selection Guide

External R<sub>T</sub> P/N Selection Table

VALUE	PART NUMBER**
100K ohm	P1004-95
100K ohm	P1004-95-X

\*\* Externally adjustable potentiometers. Numbers with additional "-X" include two pre-soldered 8" wire leads with 1/4" female quick-connect terminals (for clockwise increase).

### Function Diagram



### Specifications

#### Time Delay

**Type** Digital circuitry  
**Range** See "Ordering Information" table  
**Repeat Accuracy** ±2 %

**Fixed Time Tolerance & Setting Accuracy** ±5, 10, or 20 %

**Initiate Time** ≤ 70 ms

**Reset Time** ≤ 75 ms

**Recycle Time** ≤ 250 ms

**Time Delay vs Temp. & Voltage** ≤±5 %

#### Input

**Voltage** 24/28 V dc; 24, 120 V ac

#### Tolerance

**24 V dc/ac** -15 % - 20 %

**120 V ac** -20 % - 10 %

**AC Line Frequency** 50/60 Hz

**Power Consumption** ≤ 3.25W

#### Output

**Type** Electromechanical relay

**Form** Isolated SPDT or DPDT

**Rating** 8 A resistive @ 120/240 V ac;

1/3 hp @ 120/240 V ac

Mechanical - 1 x 10<sup>7</sup>; Electrical - 1 x 10<sup>6</sup>

#### Life

#### Protection

**Insulation Resistance** ≥ 100 MΩ

**Isolation Voltage** ≥ 1500 V rms between input & output terminals

Dc units are reverse polarity protected

#### Polarity

#### Mechanical

**Mounting** Plug-in socket

**Termination** Octal 8-pin plug-in or 11-pin plug-in

**Dimensions** **H** 44.45 mm (1.75"); **W** 60.33 mm (2.38");

**D** (with socket) 104.78 mm (4.13")

#### Environmental

#### Operating/Storage

**Temperature** -20 °C to 65 °C/-30 °C to 85 °C

**Weight** ≈ 4 oz (113 g)

#### Safety Marks

**UL (socket required)\*** 4 oz (113 g)

\*UL Listed when used with Part Number OT08-PC, RB08-PC, OT11-PC, or RB11-PC manufactured by Custom Connector Corp.

**Note:** Manufacturer's recommended screw terminal torque for the OT series sockets is 12 in-lbs.

**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Time Delay & Timing Relays](#) category:*

*Click to view products by [Littelfuse](#) manufacturer:*

Other Similar products are found below :

[5NO30](#) [614-11B-0A2](#) [614-11B-0A3](#) [614-11B-0A4](#) [614-11B-0A6](#) [614-11B-0A8](#) [614-11C-0A1](#) [614-11C-0A2](#) [614-11C-0A5](#) [614-11Q-0A3](#) [614-11Q-0A6](#) [614-11T-0A3](#) [614-11T-0A6](#) [614-11T-0A7](#) [614-12B-4A1](#) [614-12C-400](#) [614-12Q-400](#) [614-12T-600](#) [614-22T-4A1](#) [614-43B-400](#) [614-43C-100](#) [614-43F-200](#) [614-43Q-0A2](#) [614-43Q-100](#) [614-43Q-600](#) [614-43T-0A9](#) [614-43T-600](#) [614-43U-400](#) [614-43U-4A1](#) [614-43U-6A2](#) [615-21T-200](#) [655-11T-100](#) [655-11U-500](#) [655-12T-300](#) [655-22T-400](#) [655-22T-600](#) [CUA-41-30001](#) [CUA-41-30030](#) [CUA-41-70180](#) [CUA-41-71038](#) [CUA-42-30005](#) [CUA-42-30010](#) [CUA-42-30120](#) [CUA-42-70120](#) [CUA-99-72502](#) [CUC-41-30030](#) [CUF-42-30010](#) [CUH-41-31006](#) [7012AFX](#) [7012GD](#)